cutting & assembly guide

NEW

Adaptaflex®

Flexible Conduit Systems

agent details

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03/02

LIT-038

HOW TO USE THIS GUIDE

Select the page

Using the colour referenced index opposite choose the Adaptaflex conduit system you are to install. Turn to the appropriate section in this guide. On each page in the guide you will find an illustration of the conduit type and a typical fitting.

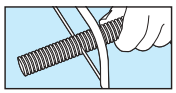
ADAPTASTEEL
STEEL FLEXIBLE SYSTEMS
TYPE S & SS

Tools required

Tools required to cut the conduit and assemble the fitting will be illustrated.
The full range of tools is illustrated below.
N.B. not all tools are applicable to all conduit

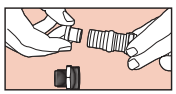
Cutting the conduit

Illustrations show you how to cut the conduit cleanly and accurately.



Fitting Assembly

How to assemble and securely fix the fitting to the conduit.



The 'Hints and Tips' section on each page will give you a few 'tricks of the trade' to help you with your installation.

NON-METALLIC SYSTEMS **METALLIC SYSTEMS**

Contents

The various Adaptaflex conduit system types, either non-metallic or metallic, are referenced here exactly as they are in our main product catalogue.

Full technical details of each conduit system are given in the catalogue.

Each page in this guide is numbered and colour coded in accordance with this contents list.

1 **ADAPTALOK** TYPE PA, PR, PI & PP

2 **ADAPTASEAL** TYPE PA, PR, PI & PP
ADAPTARING TYPE PA, PR, PI & PP

3 **LARGE DIAMETER SYSTEMS** TYPE PA, P1

4 **HI-SPEC** NON-METALLIC FLEXIBLE SYSTEMS TYPE PK, PKTC, PKSS, PRTC & PRSS

5 **KORIFIT** NON-METALLIC PLIABLE PVC SYSTEMS TYPE KF/KC
XF NON-METALLIC FLEXIBLE PVC SYSTEMS TYPE XF

6 **ADAPTASTEEL** STEEL FLEXIBLE SYSTEMS TYPE S & SS

ADAPTASTEEL COVERED STEEL FLEXIBLE SYSTEMS TYPE SP, SN & LFH-SP

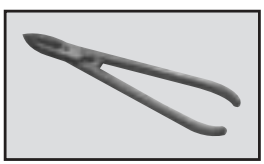
7 **ADAPTASTEEL** LIQUID TIGHT COVERED STEEL FLEXIBLE SYSTEMS TYPE SPL, SPLHC & SPUL

8 **ADAPTASTEEL** OVERBRAIDED STEEL FLEXIBLE SYSTEMS TYPE SB, STC, SPB & SPTC
HIGH STRENGTH OVERBRAIDED STEEL SYSTEM TYPE SPLHCB

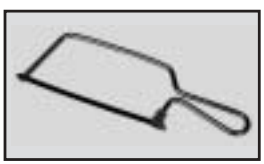
TOOLS REQUIRED

Standard Hand Tools

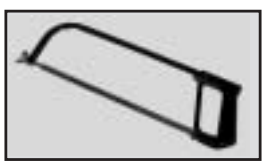
Utility knife.



Tin snips.



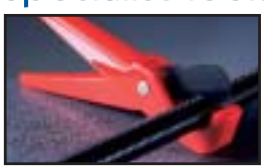
Junior hacksaw.



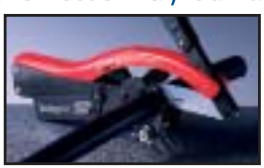
Fine tooth hacksaw- minimum 32 TPI.

Groove joint plier or adjustable spanner.

Specialist Tools (not essential, but designed to speed up installation and available from Adaptaflex)

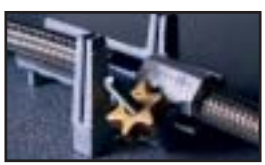


Kwikcut. (Up to 32mm/1" conduit).



Swingcut. (Between 10-32mm/¼"-1"conduit).

Rotocut. (20 & 25mm/ ½" & ¾" conduit).



Cut-vice. (Between 16-40mm/⅜"-1¼"conduit).

Adaptalok removal tool, all sizes.

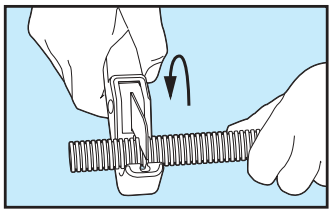
ADAPTALOK
WITH TYPE PA, PR PI & PP CONDUITS

Tools required

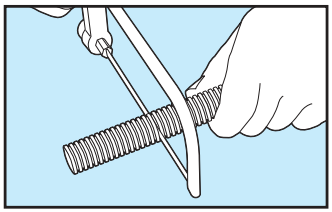
- Kwikcut cutting tool, fine-tooth hacksaw, or utility knife.
- Adaptalok removal tool to assist fitting removal.

NEW Adaptalok IP67 & IP68* Seal

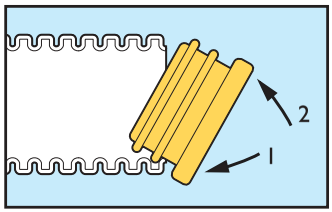
Cutting the conduit

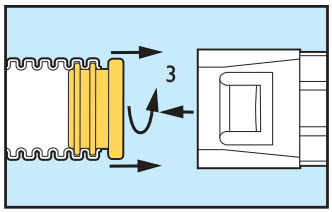


Use the Kwikcut cutting tool, or



Use a fine-tooth hacksaw, or utility knife. De-burr as necessary.

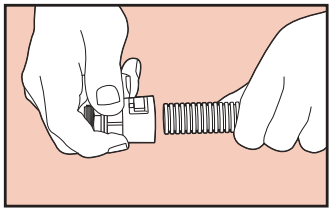




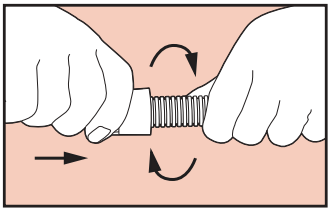
1) Angle seal approx. 30° and push one half to engage 2 ribs.
2) Push down on the ribs and feed the second half of the seal into the conduit.
3) Push conduit into Adaptalok as normal - see below.

* IP rated to IP68 - 1.1 bar for 35 mins. Without the seal IP66 is achieved.

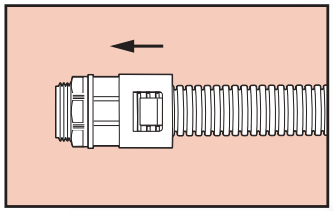
Fitting Assembly



Offer up the fitting.

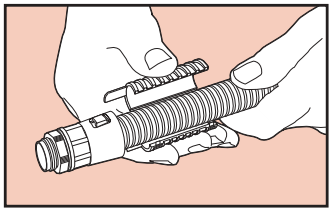


Push and twist to ensure a firm fit and seal.

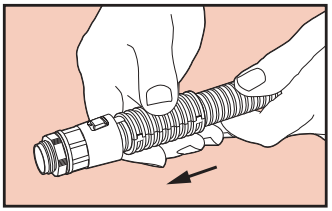


Pull back the fitting to ensure fittings lugs have properly located in conduit groove.

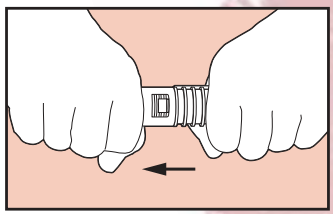
Fitting Removal



Apply the tool over the conduit.



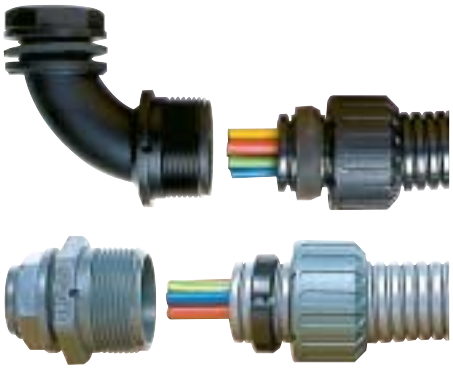
Align with fitting lugs and push tool into fitting.



Holding the removal tool, pull the fitting from the conduit.

Hints & Tips

Ensure the cutting of the conduit is square and the cut remains in the 'valley' of the corrugation.
Adaptalok fittings can also be removed by lifting the locking tabs with a small screwdriver and easing the fitting off the conduit.
The seal accessory is only required if you want to upgrade performance from IP66 to IP67/8.



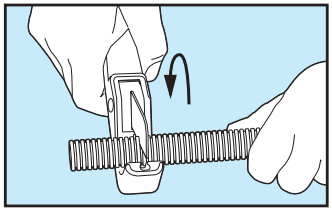
2

ADAPTASEAL & ADAPTARING
WITH TYPE PA, PR, PI & PP CONDUITS

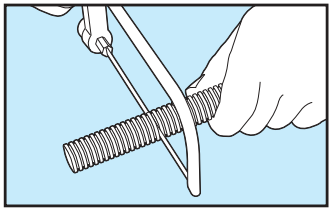
Tools required

- Kwikcut cutting tool, fine-tooth hacksaw, or utility knife.

Cutting the conduit

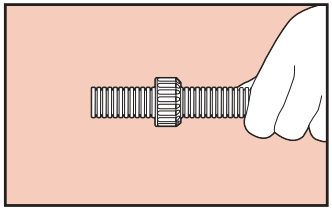


Use the Kwikcut cutting tool, or

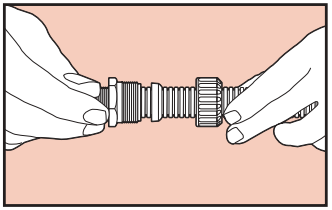


Use a fine-tooth hacksaw, or utility knife. De-burr as necessary.

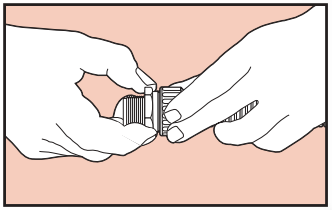
Fitting Assembly ADAPTASEAL



Apply the capnut over the end of the conduit.

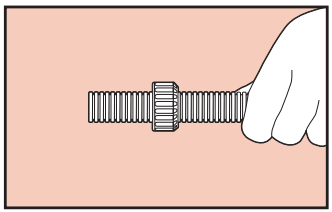


Fit sealing ring over conduit, ensuring the ribs seat in valley of the conduit, chamfered end of ring towards capnut.

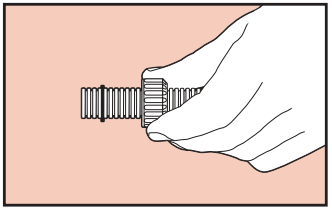


Offer fitting body up to sealing ring and fully tighten capnut by hand.

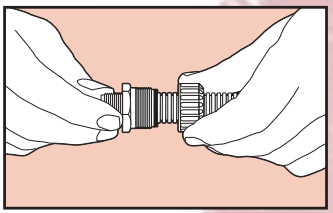
Fitting Assembly ADAPTARING



Apply capnut over end of the conduit.



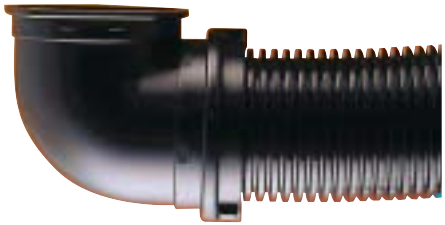
Fit 'C-ring' onto the conduit, chamfered end towards the capnut.



Apply the fitting body up to the 'C-ring' and fully tighten by hand.

Hints & Tips

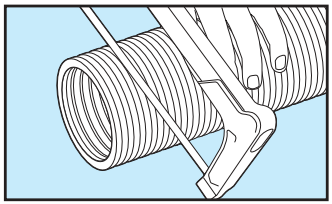
Before the body of the fitting is positioned, there should be three rings of the conduit visible after the seal or 'C-ring' is fitted.
Fitting of on anti-vibration washer (type AWB), between capnut and body, will ensure integrity of assembled fitting.



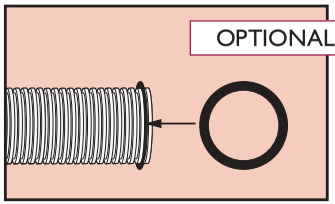
Tools required

- Fine-tooth hacksaw

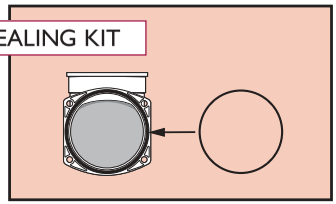
Cutting the conduit



Securely clamp the conduit and cut using a fine tooth hacksaw or utility knife, in the valley of the corrugation.

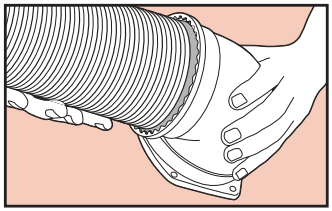


Locate the flat sealing washer in the first conduit corrugation and proceed as below.

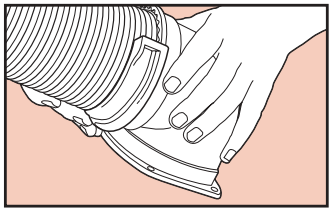


Fit the 'O' ring into the corresponding groove in the flange face.

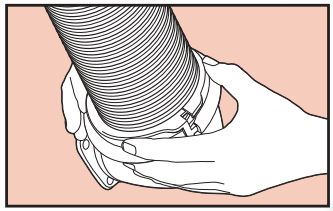
Fitting Assembly - 90° flange



Offer up the conduit into the fitting as far as the shoulder.

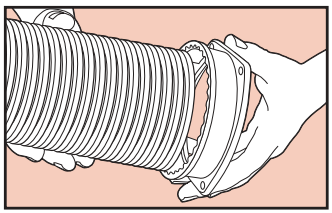


Apply one half of clamp ring, ensuring ribs in clamp ring align.

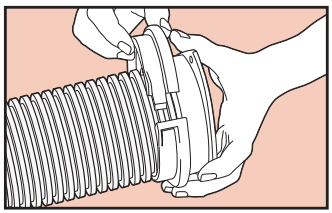


Align the second half of the clamp ring and push click together.

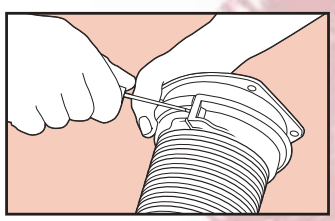
Fitting Assembly - straight flange



The straight flange fitting is assembled in a similar manner.



Clamping ring 'halves' are aligned and clipped together.



The clamping ring can be removed with a screwdriver if required.

Hints & Tips

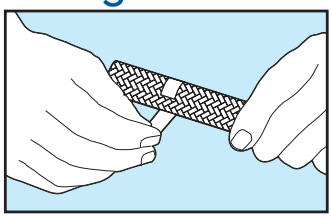
Ensure the cutting of the conduit is square and the cut remains in the 'valley' of the corrugation.
Remove any excess burr from the cut conduit.

HI-SPEC
FLEXIBLE SYSTEMS
WITH TYPE PK, PKTC, PKSS, PRTC & PRSS CONDUITS

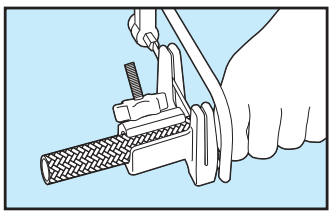
Tools required

- Fine-tooth hacksaw.
- Cut vice.
- Tin snips.
- Adjustable grips or spanners.

Cutting the conduit

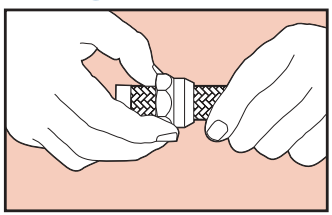


Apply insulating tape at the cutting point-2 revolutions recommended.

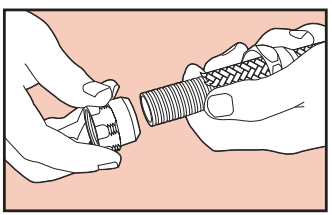


Securely clamp the conduit - preferably with a Cut-vice. Cut through the centre line of the tape.

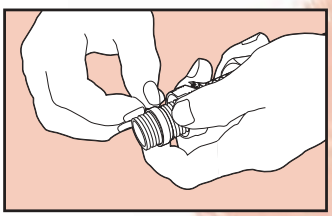
Fitting Assembly



Apply the outer capnut over the braiding before removing tape.



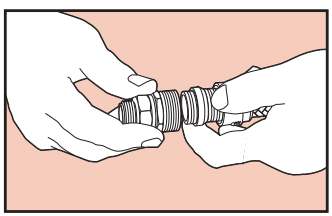
Remove tape and pull back braided sheath. Apply inner capnut.



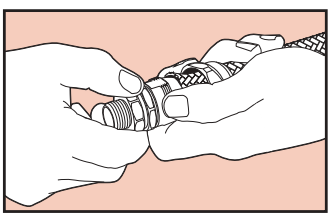
Apply sealing ring - chamfered edge towards capnut, 3 corrugations in from end of conduit.

Hints & Tips

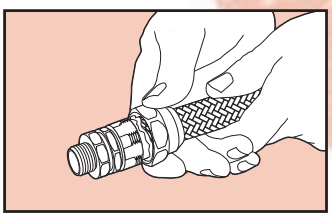
Use tin snips as required to trim the braiding after cutting with hacksaw. Other types of tape such as parcel tape, masking tape etc, can be used to facilitate cutting.



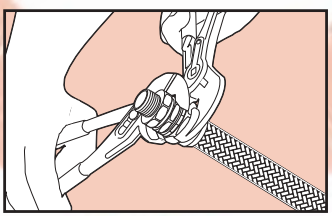
Offer up main body of fitting.



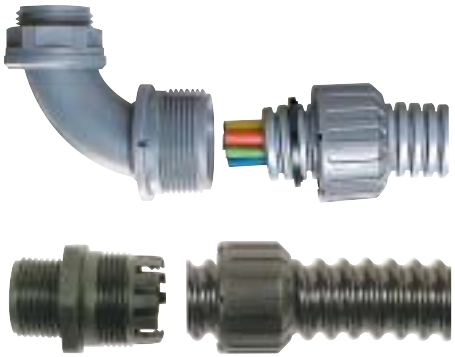
Hand tighten body of fitting onto inner locknut.



Position braiding over inner locknut and secure with outer locknut. (Ensure braid is trapped between locknuts).



Tighten components as shown.

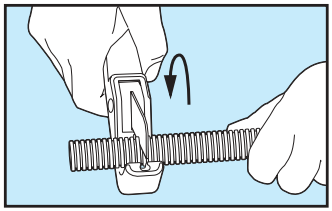


KORIFIT
NON-METALLIC PLIABLE PVC SYSTEMS
WITH TYPE KF/KC CONDUITS
XF
NON-METALLIC FLEXIBLE PVC SYSTEMS
WITH **TYPE XF CONDUIT**

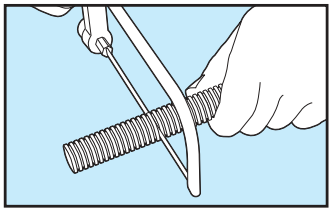
Tools required

- Fine-tooth hacksaw.
- Kwikcut cutting tool.

Cutting the conduit

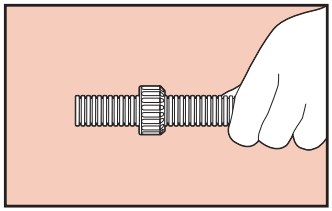


Use the Kwikcut cutting tool, or

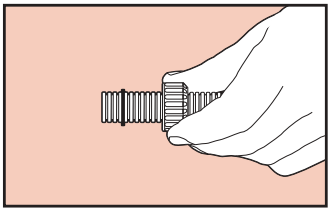


Use a fine-tooth hacksaw, or utility knife. De-burr as necessary.

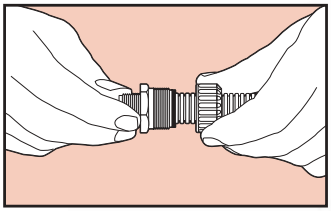
Fitting Assembly KORIFIT - 3 part fitting



Apply capnut over end of the conduit.



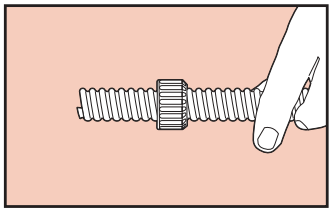
Fit 'C-ring' onto the conduit, chamfered end towards the capnut, and in the fourth corrugation groove.



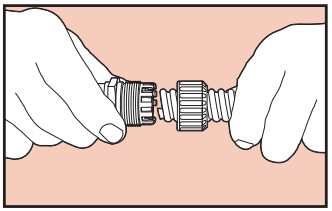
Apply the fitting body up to the 'C-ring' and fully tighten by hand.

KORIFIT - push on fitting. Fitting assembly is as for Adaptalok fittings - see section 1.

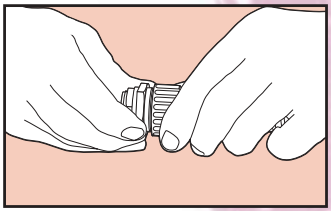
Fitting Assembly NEW XF fittings (13-32mm)



Apply capnut over conduit.



Insert conduit into fitting between 'barbs' and inner shoulder.



Fully tighten the capnut by hand.

Hints & Tips

When using push-on fittings with Korifit, use a push and twist action to ensure a good seal.

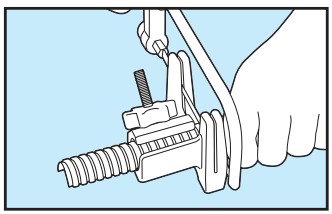
Tools required

- Fine-tooth hacksaw and Cut-vice
- Rotocut.
- Adjustable grips or spanners.
- Utility knife.

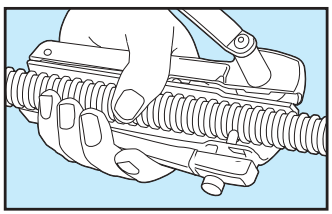
ADAPTASTEEL
STEEL FLEXIBLE SYSTEMS
WITH TYPE S & SS CONDUITS

ADAPTASTEEL
COVERED STEEL FLEXIBLE SYSTEMS
WITH TYPE SP, SN & LFH-SP CONDUITS

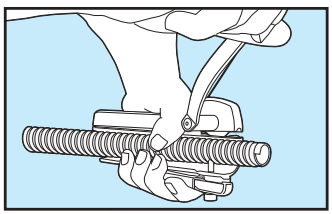
Cutting the conduit



Securely clamp the conduit - preferably with a Cut-vice - and use a fine tooth hacksaw, or

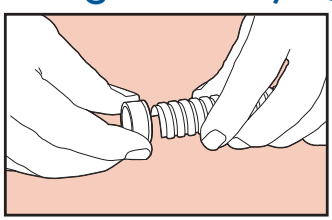


Use a Rotocut.
Position and clamp conduit at position of required cut.

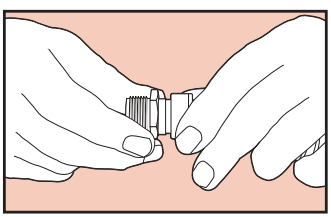


As handle is turned, gently squeeze onto conduit to cut through spiral, then remove and twist to separate.

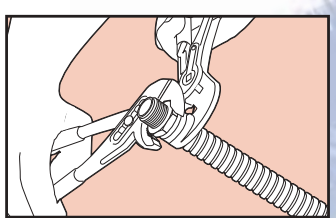
Fitting Assembly - types A & B



Fit ferrule over end of conduit.



Screw fitting through ferrule into conduit.

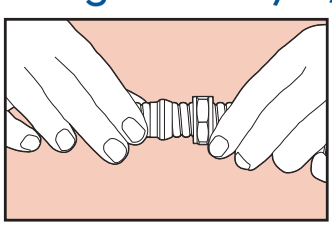


Tighten with grips.

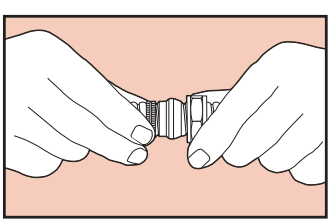
Hints & Tips

If using Rotocut with covered conduit, use a utility knife to cut through the pvc sheath.
A clean, square cut will ease subsequent fitting assembly.

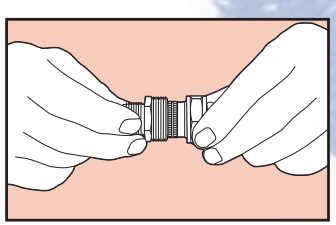
Fitting Assembly - type M



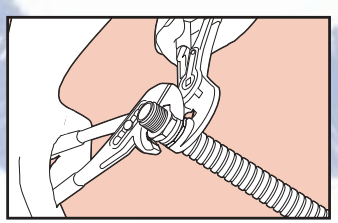
Apply capnut then sealing ring - chamfered end towards capnut.



Screw insert into end of conduit.



Offer up body and tighten capnut.



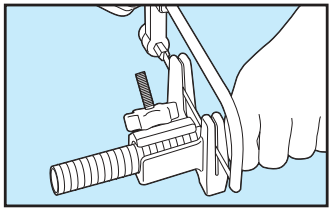
Install and position fittings into desired threaded entry, then fully tighten the fitting.

ADAPTASTEEL
LIQUID TIGHT COVERED STEEL FLEXIBLE SYSTEMS
WITH TYPE SPL, SPLHC & SPUL CONDUITS

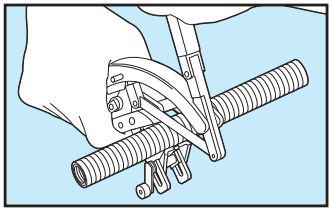
Tools required

- Fine-tooth hacksaw.
- Cut-vice conduit vice.
- Swingcut conduit cutter.
- Adjustable grips or spanners.

Cutting the conduit

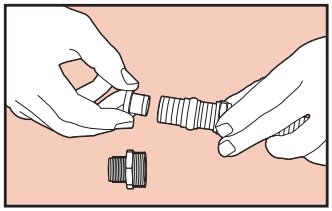


Securely clamp the conduit - preferably with a Cut-vice - and use a fine tooth hacksaw, or

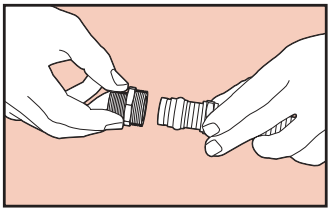


Use a Swingcut.

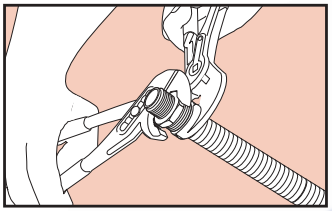
Fitting Assembly - slim M type fittings



Push capnut then seal over conduit, screw in end fitting - chamfered end towards capnut.

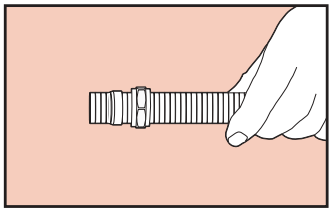


Offer up body of fitting and hand-tighten capnut.

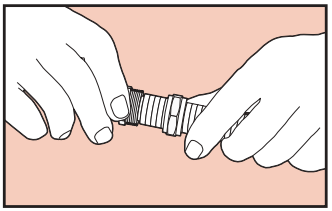


Install and position fittings into desired threaded entry, then fully tighten the fitting.

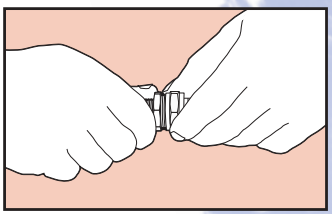
Fitting Assembly - types A & B



Apply capnut and sealing ring over conduit, ensuring chamfered edge of seal is towards fitting body.



Fully screw the fitting into the conduit.



Screw the capnut onto the fitting and tighten with grips or spanners as above.

Hints & Tips

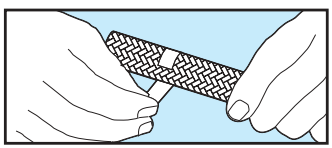
For M type fitting, ensure liquid tight seal is applied as shown, with tapered side towards capnut.
For fitting types A & B, seal is applied with chamfered side to fitting body.

Tools required

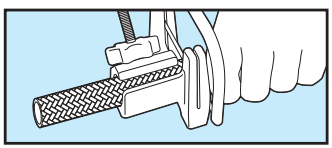
- Fine tooth hacksaw.
- Cut-vice.
- Tin snips.
- Adjustable grips or spanners.

ADAPTASTEEL
OVERBRAIDED STEEL FLEXIBLE SYSTEMS
WITH TYPE SB, STC, SPB & SPTC CONDUITS
HIGH STRENGTH OVERBRAIDED STEEL SYSTEM
WITH TYPE SPLHCB CONDUIT

Cutting the conduit

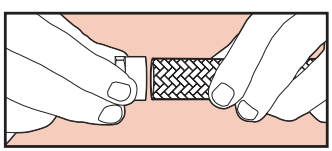


Apply insulating tape at the cutting point-2 revolutions recommended.

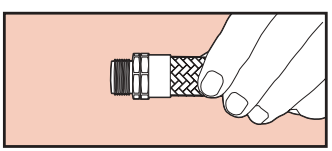


Securely clamp the conduit - preferably with a Cut-vice. Cut through centre line of tape.

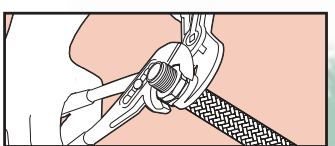
Fitting Assembly - conduit types SB, STC, SPB, & SPTC



Remove tape, pinch braiding against inner conduit and apply ferrule.

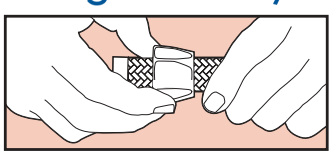


Screw fitting body into conduit.

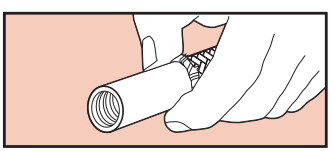


Tighten with grips or spanners.

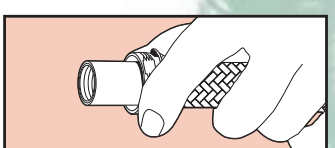
Fitting Assembly - for conduit type SPLHCB



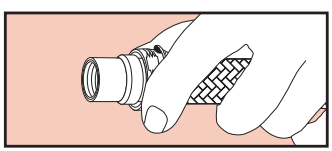
Before removing tape, place outer capnut onto conduit.



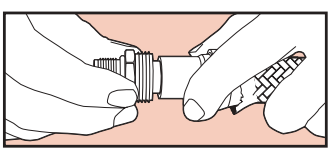
Remove tape and pull back braiding to expose approx 50mm (2in) of conduit.



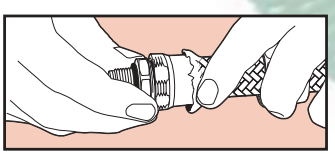
Apply inner nut to seat under braiding.



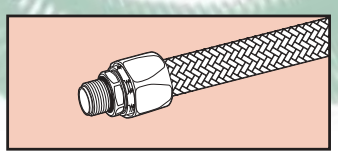
Apply sealing ring with chamfer towards cut end of conduit.



Screw body of fitting into conduit.



Screw inner nut onto fitting.



Screw outer nut onto inner nut ensuring braid is trapped securely and tighten with grips or spanners.

Hints & Tips

Use tin snips as required to trim the braiding after cutting with hacksaw. Take care when pulling back the outer braiding.

Due to the specialist nature of this conduit we offer a cutting and assembly service. Please ask for details.